AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended) Method of manufacture of a steel piston for an internal combustion engine, the said piston being formed from a steel part cast in one piece so as to be in a first state, wherein heating of a billet in the first state is carried out without carrying out a separate operation of globulization of separated primary structure so as to bring it to an intermediate temperature between its solidus temperature and its liquidus temperature, and that shaping thereof by thixoforging is carried out.

Claims 2-16 (Canceled)

Claim 17 (Currently Amended) The method of Claim 1, wherein the steel piston is produced from carbon steel having C content of 0.35% by weight or more.

Claim 18 (Currently Amended) Method of manufacture of a piston for an internal combustion engine, the said piston being formed from a steel part cast in one piece, wherein heating of a billet is carried out so as to bring it to an intermediate temperature between its solidus temperature and its liquidus temperature, and that shaping thereof by thixoforging is carried out, ~~The method of Claim 17,~~ wherein the steel piston has a composition, in percentages by weight, of:

- $0.35\% \leq C \leq 1.2\%$
- $0.10\% \leq Mn \leq 2.0\%$
- $0.10\% \leq Is \leq 1.0\%$
- traces $\leq Cr \leq 4.5\%$
- traces $\leq Mo \leq 2.0\%$
- traces $\leq Ni \leq 4.5\%$
- traces $\leq V \leq 0.5\%$
- traces $\leq Cu \leq 3.5\%$
- traces $\leq Al \leq 0.060\%$
- traces $\leq Ca \leq 0.050\%$

- traces ≤ B ≤ 100 ppm
- traces ≤ Ti ≤ 0.050%
- traces ≤ Nb ≤ 0.050%

the other elements being iron and conventional impurities resulting from the manufacture.

Claim 19 (Previously Presented) The method of Claim 18, wherein the steel piston includes up to 0.180% of S and one at least of the elements chosen from amongst up to 0.080% of Bi, up to 0.020% of Te, up to 0.040% of Se, up to 0.070% of Pb.

Claim 20 (Previously Presented) The method of Claim 1, wherein the steel piston is produced from hot-tooling steel.

Claim 21 (Previously Presented) The method of Claim 1, wherein the steel piston is produced from high-speed steel.

Claim 22 (Previously Presented) The method of Claim 1, wherein the steel piston is produced from stainless steel.

Claims 23-25 (Canceled)

Claim 26 (Previously Presented) A method of making a piston for an internal combustion engine comprising:

casting and cooling a steel material;

heating the steel material so as to bring the steel material to an intermediate temperature between its solidus temperature and its liquidus temperature;

at least one of said casting, said cooling and said heating comprising obtaining a globular primary structure of the steel material;

shaping the steel material by thixoforging the steel material at the intermediate temperature so as to form the piston; and

the globular primary structure of the steel material is obtained without an operation of globulization separate from said casting, cooling and heating.

Claim 27 (Canceled)